

TWO NEW SPECIES OF *PASSIFLORA* (PASSIFLORACEAE)  
FROM NORTHERN SOUTH AMERICA

Linda K. Escobar

Departamento de Biología, Universidad de Antioquia, Apartado Aéreo 1226,  
Medellín, COLOMBIA

ABSTRACT

A taxonomic revision of *Passiflora* L. subgenus *Astrophea* (DC.) Mast., has revealed the presence of a new species, *Passiflora aragüensis* *spec. nov.* from the tropical forest of the state of Aragua in Venezuela. A second undescribed species, *Passiflora magnifica* *spec. nov.*, was discovered during intensive collecting efforts by the herbarium staff of HUA on the western slopes of the Cordillera Occidental in northern Colombia. This beautiful species is related to the edible, commercially valuable "granadilla", *P. ligularis* Juss. and is placed in subgenus *Passiflora* series *Tiliifoliae*. Both species are lianas with axillary tendrils, and both grow in moist habitats.

KEY WORDS: *Passiflora*, Passifloraceae, Colombia, Venezuela, taxonomy, new species

1. *Passiflora aragüensis* L. Escobar, *spec. nov.* TYPE: VENEZUELA. Aragua: Camino de Ronda de Guamitas, Parque Nacional, 12 Apr 1938 (fl), E. Delgado 124 (HOLOTYPE: F!).

*Passiflora lindenianae* Triana & Planchon similis sed differt cirrhis, fructibus fere sphaericis pubescentia albida lanata, et floribus filamentis coronae in seriebus 5-6. Differt a *P. costata* Mast. foliis ellipticis vel oblongis venis lateralibus paucioribus et floribus ac fructibus minoribus.

Lianas with concentric rings of secondary wood and weak tendrils, glabrous except for ovaries. Young stems terete, yellowish brown or greenish brown. Leaf blades elliptic to oblong, 10.7-19.3 cm long, 5.0-8.4 cm wide, acuminate to acute at apex, acute at base, entire at margins, subcoriaceous to coriaceous,

drying grayish green or brown, with 9-12 major lateral veins; foliar nectaries on abaxial surface of midvein ca. 3 mm from base, 2, or these divided into 4, oval, scarlike, 1.2-2.0 mm long, 0.4-1.1 mm wide; petioles stout, 2.0-3.5 cm long, 1.2-1.3 mm diam.; stipules triangular to ligulate, 2-4 mm long, 0.5-1.0 mm wide at base. Peduncles solitary in leaf axil, 7-10 mm long, 1.0-1.8 mm diam.; bracts dissitate, triangular, 0.7-1.0 mm long, ca. 4 mm wide at base. Flowers campanulate, ca. 3.5 cm long, ca. 3.5 cm diam., white with yellow corona; flower stipe stout, ca. 1 cm long, ca. 1.3 mm diam.; hypanthium campanulate, ca. 5 mm long and wide at base, ca. 8 mm wide at apex; sepals oblong, ca. 2.8 cm long, ca. 6 mm wide; petals subequal to sepals; corona in 5-6 series, the outer dolabriform, ca. 12 mm long, ca. 0.8 mm wide at base, widening to 1.3 mm ca. 4 mm from apex, the second series dolabriform, ca. 3 mm long, ca. 0.2 mm wide at base, to 1 mm wide at apex, the next 2 series linear, 1.5-2.0 mm long, ca. 0.3 mm wide, the innermost series filamentous, reflexed into hypanthium, ca. 1.3 mm long, 0.10-0.15 mm wide; operculum arising ca. 0.8 mm from apex of hypanthium, ca. 3 mm long, dependent then recurved, crenate at margin; ovary spherical, densely pubescent, with whitish lanate trichomes to 0.5 mm long; styles slender, ca. 7 mm long, ca. 0.6 mm diam., pubescent to apex. Fruits spherical or ellipsoid, 3.0-3.5 cm long, 2.4-4.0 cm wide (pressed), with brittle pericarp, greenish; seeds widely obovate, ca. 6.5 mm long, ca. 6 mm wide, with coarse reticulate pitting on testa.

Distribution. *Passiflora araguënsis* is known only from two collections made in the National Park of Guamitas at about 800 meters elevation.

Additional Specimens Examined. VENEZUELA. Aragua: Guamitas, Parque Nacional, 16 Jun 1939 (fr), *Ll. Williams 11134* (F, GH, US).

This species is placed in subgenus *Astrophea* (DC.) Mast. sect. *Astrophea* (Harms) Killip. It has been confused with *Passiflora lindeniana* Triana & Planchon, which it superficially resembles due to the bifurcate peduncles and which is found in the same general geographic area, but *P. lindeniana* is a tree, lacking tendrils, and is mostly found at higher elevations. The fruiting specimen of *P. araguënsis* is distinguished from *P. lindeniana* also by the more spherical fruit with long, whitish, lanate pubescence, and flowering specimens can be separated by the large number of series of coronal filaments.

*Passiflora araguënsis* also superficially resembles *P. costata* Mast., a liana found on inundated soils of the Amazon forest. However, that species produces mostly obovate leaves with a larger number of lateral veins, much larger fruits, and larger flowers.

2. *Passiflora magnifica* L. Escobar, *spec. nov.* TYPE: COLOMBIA. Antioquia: Municipio Frontino, Corregimiento La Blanquita, 14.5 km W of Nutibara (6° 45' N, 76° 25' W), 1-8 km S of Alto de Cuevas, 11 Jul 1988 (fl, fr), *R. Callejas, J. Betancur, I. Castaño, & A.L. Arbeláez 6586* (HOLOTYPE: HUA!; Isotype: MO!).

*Passiflora ligulari* Juss. f. *lobati* Mast. et *P. platylobae* Killip similis; ab specie prima differt bracteis majoribus 8.5-8.7 cm longis; ab specie secunda differt stipulis ligulatis 3.0 cm longis ca. 1 cm latis et petiolorum nectariis 4-6 elongatis.

Glabrous lianas with concentric rings of secondary wood and strong tendrils. Young stems terete to subangulate, striate, hollow, yellowish brown. Leaf blades widely ovate to very widely ovate, trilobed to  $1/2$ - $2/3$  their length, 13-23 cm long, 14.8-27.5 cm wide, acuminate at apex of lobes, cordate at base, entire to very shallowly and remotely glandular serrate at margins, with scattered oval, subsessile dark brown nectaries 0.5-1.0 mm long in sinus of leaf lobes, membranaceous to subcoriaceous, drying yellowish green to dark khaki brown, with 5-7 major lateral veins; midlobes of leaves elliptic to oblong, 16.0-18.5 cm long, 6.4-10.0 cm wide; lateral lobes ovate, 13.5-21.0 cm long, 6.1-11.5 cm wide; petioles 7-11 cm long, 1.2-2.0 mm diam., with 2-6 mostly paired stipitate nectaries to 5 mm long scattered along upper  $2/3$  of adaxial surface; stipules ligulate, 2.7-3.0 cm long, ca. 1 cm wide, acuminate at apex. Peduncles solitary in leaf axil, 9.5-12.0 cm long, 0.8-1.0 mm diam.; bracts ovate, verticillate, 7.8-8.7 cm long, 4.2-5.0 cm wide, connate 1.7-2.0 cm from base, acuminate at apex, obtuse at base, entire at margins, purple on adaxial surface. Flowers campanulate, pendent, ca. 4.5 cm long, ca. 4.5 cm diam., white to lavender, with purple corona; flower stipe slender, 1.0-1.1 cm long, 0.8-1.0 mm diam.; hypanthium short campanulate, 7-8 mm long, 8-12 mm wide at base, 10-14 mm wide at apex; sepals triangular, 2.5-3.0 cm long, ca. 8 mm wide at base, acuminate at apex, subcoriaceous, with subapical aristae 6-8 mm long on abaxial surface, light green on abaxial surface, lavender on adaxial surface; petals subequal to sepals, membranaceous, lavender; corona in 4 principal series, the outer 2 filamentous, ca. 2 cm long, ca. 2 mm wide, slightly wavy towards apex, striped in concentric bands with purple, the inner 2 series filamentous, 3-4 mm long, ca. 0.8 mm wide, followed by irregular, scattered tubercles on the upper  $1/3$  of the hypanthium; operculum horizontal, ca. 5 mm long, lacerate almost to base, membranaceous, reddish purple; ovary ellipsoid to subspherical. Fruits subspherical, 6.0-6.5 cm long, 4.5-5.0 cm wide (pressed), with brittle, orange-yellow pericarp; seeds obovate, mucronate at apex, ca. 5 mm long, ca. 3.5 mm wide, with reticulate pitting on testa, dark brown at maturity.

Distribution. This species is so far known only from rainy, western slopes on the western Cordillera of Colombia. There are several collections from the region of Murri, Dept. of Antioquia, Colombia at elevations between 1250 and 1750 meters.

Additional Specimens Examined. COLOMBIA. Antioquia: Municipio Frontino, Corregimiento Murri, road from Nutibara to La Blanquita, 2 Jul 1983 (fl), Bernal, et al. 634 (HUA); km 22.6 from Nutibara to La Blanquita,

5 Nov 1988 (fr), Zarucchi, et al. 7157 (HUA).

*Passiflora magnifica* is placed in subgenus *Passiflora*, where it most closely resembles *P. ligularis* Juss. f. *lobata* Mast. It is easily distinguished from that taxon by the much larger bracts. The Central American species *P. platyloba* Killip, also possesses large bracts but has neither the large ligulate stipules nor the 4-6 elongated petiolar nectaries.

#### ACKNOWLEDGMENTS

I thank Dr. Guy Nesom for the Latin diagnosis and both him and Dr. B.L. Turner for critical reading of the manuscript.